



Fikrah: Jurnal Ilmu Aqidah dan Studi Keagamaan
issn 2354-6174 eissn 2476-9649
Tersedia online di: journal.iainkudus.ac.id/index.php/fikrah
Volume 11 Nomor 2 2023, (281-298)
DOI: 10.21043/fikrah.v8i1.19125

Paradigm of integration-interconnection: M. Amin Abdullah and Mehdi Golshani's perspective

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Abstract

The existence of a monodisciplinary approach leaves no room for discussion between the sciences. There needs to be an interconnection and integration approach so that some sciences can reveal ideas to solve the problems faced. The focus of this research is on the comparison of the thoughts of M. Amin Abdullah and Mehdi Golshani on the integration of scientific interconnections. This research is library research through data collection techniques by searching for sources, either articles, books, or other sources relevant to the topic of discussion. After collecting the data, it is selected, analyzed, and conclusions formulated. The results showed that Mehdi Golshani supported the integration of scientific interconnection, but only for religion and science. In contrast to the perspective of M. Amin Abdullah, who created the idea of interconnection between religious science and general science, not only science was described through spider webs. M. Amin Abdullah assumes that religion and general science must be open to each other, even though each science has characteristics. With openness, it can create space for discussion so that what is debated as a problem can be criticized to produce a more comprehensive opinion.

Keywords: integration interconnection, M. Amin Abdullah, Mehdi Golshani

Abstrak

Adanya pendekatan monodisiplin menyebabkan tidak adanya ruang untuk saling berdiskusi antara suatu ilmu. Perlu adanya pendekatan integrasi interkoneksi agar beberapa ilmu dapat mengungkap gagasan sehingga mampu menyelesaikan permasalahan yang dihadapi. Fokus penelitian ini pada komparasi pemikiran M. Amin Abdullah dan Mehdi Golshani tentang integrasi interkoneksi keilmuan. Penelitian ini ialah library research melalui teknik pengumpulan data dengan penelusuran sumber-sumber baik dari artikel, buku atau sumber lain yang relevan dengan topik pembahasan. Setelah dikumpulkan data diseleksi, dianalisis, dan dirumuskan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa Mehdi Golshani mendukung adanya suatu integrasi interkoneksi keilmuan tetapi hanya untuk ilmu agama dengan ilmu sains. Berbeda halnya dengan perspektif M. Amin Abdullah yang menciptakan gagasan interaksi interkoneksi antara ilmu agama dengan ilmu umum tidak hanya sains dan digambarkan melalui jaring laba-laba. M. Amin Abdullah berasumsi bahwa antara ilmu agama dan ilmu umum harus saling bersikap terbuka walaupun masing-masing ilmu memiliki karakteristik, akan tetapi dengan adanya keterbukaan mampu menciptakan ruang untuk berdiskusi sehingga apa yang menjadi perdebatan suatu masalah mampu dikritisi sehingga menghasilkan pendapat yang lebih menyeluruh.

Katakunci: integrasi interkoneksi, M. Amin Abdullah, Mehdi Golshan

Introduction

Historically, there has been no conflict between science and religion. Various studies have concluded that science and religion can work synergistically. One research by Ade Yeti et al. concluded that an integrative curriculum could be implemented in practical education in Islamic universities (Nuryantini et al., 2018). Religion and science do not have a contradiction and the requirement for separation. It brings the view that Islam accepts the relationship paradigm between religion and science. However, many views focus only on one or a monodisciplinary scientific field. The researcher thinks that only focusing on one scientific area can create problems or result in shallow and unfounded solutions. There is no opportunity between one scientific field and another for discussion. So, no other opinions can support this view of the problem.

According to Ali Akbar and Mahyuddin Barni, a monodisciplinary approach, especially in the field of religious knowledge, will have an impact on understanding and interpretation. It is because of the loss of contact with reality and its relevance to the surrounding environment (Akbar & Barni, 2022). According to Bustanuddin Agus in Ali Akbar & Mahyuddin Barni, a monodisciplinary view causes errors in understanding related to context or social problems, for example, the environment, corruption, development

problems, or other problems. Thus, there is a need for an integration of knowledge. It is used to enrich the understanding and refers not only to one scientific point of view but to various scientific points of view. So, an in-depth answer to a problem is obtained (Akbar & Barni, 2022). Especially in the current era, the education process always follows a developed era. One of the efforts to develop civilization is education, an instrument (Hidayat, 2021). The educational process strives to realize scientific integration so that every human being sees various problems not only from one scientific point of view.

Science integration is done by inserting religious knowledge into general science, having a community service agenda, and collaborating with lecturers across study programs (Sumarni & Suprpto, 2022). Integration-interconnection is a form of study developing in Indonesia (Suryadilaga, 2020); as far as the author has researched, writings about integration-interconnections of science have been widely discussed in articles and books, for example, the writings about the integration of science conducted by M. Amin Abdullah's perspective and Mehdi Golshani's. It is still rare to find writings that compare M. Amin Abdullah's thoughts with Mehdi Golshani's regarding the integration and interconnections of science.

This article compares M. Amin Abdullah's integration-interconnection thinking, who has a social science (philosophy) background, with that of Mehdi Golshani, who has a natural science background. Based on the explanation above, the author's interest in exploring comprehensively how M. Amin Abdullah and Mehdi Golshani expressed their views regarding the integration-interconnections of science. Then, the author compared the thoughts between the two figures. To explore the information in this paper, the author used a type of literature study, namely by obtaining data from the book entitled *Multidisciplinary, Interdisciplinary, & Transdisciplinary Methods for the Study of Religion & Islamic Studies in the Contemporary Era* by M. Amin Abdullah and *The Holy Quran and the Sciences of Nature* by Mehdi Golshani, complemented by various topics in previous articles. After the data is collected, data selection is carried out and continues with a conclusion. Then, the data was analyzed descriptively and continued with content analysis derived from "content analysis" with an MD structure. From this article, the author expects to provide additional scientific points of view related to its important application integration of science, whether in terms of curriculum, learning systems, or anything related to certain sciences. So, it can form an interaction in discussions between various fields of scientific study.

The Meaning of Integration-Interconnection

Before discussing integration-interconnection education, it is first necessary to know the terms integration and interconnection in science. According to the Great Dictionary of Indonesian Languages (KBBI), integration is the blending that makes one whole or can be complete. In English, integration refers to three words: integrate, which means integrating or uniting. Integration means combining, and integrity means sincerity or honesty. Then, the science integration paradigm means a certain view of science that has the characteristic of being unifying (Asmariansi & Nurmaidah, 2017). Umi Hanifah explained that an integrative science is a condition that can be said to be realized as soon as possible (Hanifah, 2018). According to Andi Aco Agus, integration means perfection or comprehensiveness. In the social sphere, integration means adjusting different elements of social life (Agus, t.t.).

According to Mohammad Rizkiyan Azhari et al., integration is a mix of unity, and integration occurs in various fields ranging from social, political, cultural, economic, and other fields. In this diversity of fields, the meaning of integration is roughly a form of unifying elements that are different in character or classification based on a concept, paradigm, or unit (Azhari et al., 2022). Based on the definition of integration, integration combines one particular scientific field with another to achieve a goal. According to R.K. Kerimbayeva et al., integration in education can improve the quality of students' knowledge. It can expand the pedagogical process and form a consistent relationship (Kerimbayeva et al., 2021). Therefore, according to the author, scientific integration in education is necessary.

Furthermore, it is related to interconnection that has linkages with integration. Integration-interconnection has a different meaning but has the same goal by combining two problems. This matter is based on Lailatul Aslamiyah et al., where integration studies one field by looking at others. At the same time, interconnection is a view of the interconnectedness of scientific disciplines (Aslamiyah et al., 2017). According to KBBI, interconnection is a relationship with each other (quoted from <https://kbbi.web.id/interkoneksi>, October 12, 2022, at 04.45 WIB). Thus, from the two explanations related to these interconnections, this term is a view based on the relationship between various scientific disciplines so that a link between various scientific disciplines is formed.

Through the link between integration and interconnection, an assumption arises regarding the integration-interconnection paradigm, according to Amin Abdullah in Syahril Labaso. It explains that the integration-interconnection paradigm is an effort to dialogue between various scientific disciplines to be connected and unified. It means that the different scientific disciplines do not become trapped in attitudes, in this case, an arrogant attitude, or it could be said to feel that the only one is right. Besides that, he also aims to create awareness of the boundaries of each scientific discipline to create collaborative relationships, even though they come from different scientific groups (Labaso, 2018).

The integration-interconnection paradigm is directed as a unification process, i.e., there is no connection, or cannot stand alone. So, it has main regional duties in both religious and scientific knowledge, including natural science, social science, and humanities (Labaso, 2018). According to Toto Suharto, a clear view was obtained after examining the integration-interconnection paradigm. The Al-Qur'an inspired Amin Abdullah because it was evidence of his integrated and interconnected scientific views (Suharto, 2018).

According to Amin Abdullah, it is borrowing the opinions of Fahmi and Muhamad regarding the integration-interconnections of science. It is an approach that is mutually respectful in the sphere between religious science and general science. It is also based on awareness of each other's limitations in solving every human problem so that cooperation and mutual understanding of an approach and thinking method can be achieved. Epistemologically, the integration-interconnection approach answers the difficulties with the dichotomy of either religious education or general education. Axiologically, the integration-interconnection approach offers various sciences to be flexible and interact with each other. Ontologically, the integration-interconnection approach is an open relationship between various scientific disciplines, even though there are territorial boundaries between religious science and general science (Fahmi & Rohman, 2021).

From the integration-interconnection paradigm that has been explained, the author can explain that integration-interconnection refers to an effort to unify various scientific disciplines so that science can relate without any contradictions that give rise to conflict between them. With this merging process, no thought assumes the most correct so that the

integration-interconnection paradigm can create openness and mutual understanding between various scientific disciplines.

M. Amin Abdullah's contribution to the Integration-interconnection Paradigm

The author briefly presents his biography before discussing M. Amin Abdullah's contribution. He was born on July 28, 1953, in Pati, East Java. Besides, he is a professor of Islamic studies and Philosophy at UIN Sunan Kalijaga Yogyakarta. His education is *Kulliyatul Mu'allimin al-Islamiyyah* (KMI), 1966-1972, at the Gontor Ponorogo Islamic Boarding School. He also studied at Bacaloriat, Darussalam Gontor Education Institute Ponorogo in 1972-1978, and Doctorandus Comparative Religion at IAIN Sunan Kalijaga Yogyakarta in 1978-1982. His S2-S3 education graduated from the Department of Philosophy, Middle East Technical University (METU) Ankara, Turkey, in 1984-1990 (Abdullah, 2022).

M Amin Abdullah describes the concept of integration-interconnection through the scientific "spider web" metaphor, explaining that integration is used. It has an effort to reconstruct science. Meanwhile, it can be said that interconnection does not reach scientific integration. However, it can be ensured that a meeting will occur in the form of comparison, confirmation, complementation, or contribution. This opinion embodies the belief that integration-interconnection is a desire to give birth to a scientific style that presents several scientific fields as a source of integration that can maintain the existence and relevance of science with current developments (Labaso, 2018).

Integrating the interconnection of sciences forms the view that every scientific structure, whether in religious, social, humanities, or natural sciences, cannot stand alone. Specifically, it can be said to create space in the dialectic between text civilization, scientific civilization, and philosophical civilization. So it can be said that the integration-interconnection paradigm demands availability in terms of weighing the substance of the text in the form of religious commitment, availability in terms of professionalism, objectiveness, and innovation in the scientific field being studied, as well as availability in making connections between knowledge obtained from what has been dialogued and accounted for. Morally ethical in the real-life aspects of the community environment (Abdi, 2020).

M. Amin Abdullah's ideas regarding the integration-interconnection paradigm in Supriyanto Abdi appear to be influenced by Kuntowijoyo's thoughts. The difference is his elaboration, broadly related to integrating scientific scope with an emphasis on the interconnection aspects of various disciplines and scientific epistemologies. Then, integration-interconnection can contribute to the open integration of science or dialogic. It describes how to view science with an open nature and respect for its existence. The various types of scholarship while still providing space for critical dialogue. As the author has stated, M. Amin Abdullah uses the "spider web" principle to explain the integration of knowledge (Abdi, 2020).

The spider's web consists of several layers. The spider's web's first layer is scientific knowledge containing the Al-Qur'an and Hadith, which are normative sources of Islam. Then, for the second layer, the contents are various approaches, study focuses, or methods about these two normative sources. Then, between the first and second layers, the third layer is born, the content of which is traditional knowledge of Islam, in this case, such as tafsir, kalam, fiqh, hadith, or other Islamic sciences. The layers are increasingly expanded with the formation of a fourth layer whose contents are views or perspectives on science, such as philosophy, history, sociology, anthropology, philology, psychology, and archaeology, which can expand the meaning and contextualize the third layer, Islamic science. Next, the last layer of the spider's web, through its connection with the previous four layers, contains an issue that is actual and newest, for example, related to religious pluralism, democracy, or other recent issues (Abdi, 2020).

Integration-interconnection brings to the philosophical scope of integration-interconnection, which is required for existing assessments and the fundamentals of their relationship to various other scientific disciplines and humanistic values. Second, it will lead to a material realm where integration-interconnection is a process of integrating general and Islamic truth values, especially in learning general subjects, for example, philosophy or other general subjects. The third refers to tactics, which are a realm of implementation or activities of the scientific learning process of integration-interconnection (Aminuddin, 2010).

However, the practical implementation of the integration-interconnection paradigm centered at UIN (Islamic Universities) is still limited. It is because there is a tendency to fall into something purely epistemological and ideological criticism, so it can be said that it has not

touched the realm that has been explained previously. From this explanation, the author considers that the concept of an integration-interconnection paradigm, which is assumed to be like a spider's web by M. Amin Abdullah, can make a real contribution, one of which is the implementation of learning that integrates interconnections, especially about the curriculum, methods and used strategies (Aminuddin, 2010).

Mehdi Golshani's Contribution to the Integration-interconnection Paradigm

Before discussing Mehdi Golshani's contribution, the author briefly presents his biography. He was born in 1939, coincidentally at 131 AH, in Isfahan, Iran. His focus study is physicist, and he earned a B.Sc degree at the University of Tehran and a Ph.D. at the University of California Berkeley in the United States with the same scientific studies, with his scientific specialization being in Particle Physics (Musyoyih & Salsabila 2020). Mehdi Golshani's contribution to the integration-interconnection paradigm refers to the openness of the mindset of unity between religion and science. Zulpa Makiah often explains the problematic relationship between religion and science (Makiah, 2021).

Meanwhile, according to Raha Bistara, science and religion are not facts that are binary in nature or, in this case, intersect. He considers God as the highest center of existence and the point of human activity, although every human activity is not all based on ritual but will create a feeling of closeness to God. It is the same with science, which is also designated as an instrument in introducing and understanding the existence of God. So, its truth parallels religious worship and worship in general (Bistara, 2020).

Golshani in Raha Bistara said that in the Al-Qur'an, many verses explain the relationship between religion and science and have a subtle nature for aspects of life, for example, in QS Al-Ankabut: 20, which explains the origins of human evolution (Bistara, 2020). From this, Mehdi Golshani's view regarding integrating science and religion is that there is no conflict. Naturally, there is no contact between the two, but on the contrary, science and religion are closely related and even complement each other. This point of view is based on Mehdi Golshani and begins with a philosophical construction point of view and the existence of beliefs in each person (Bistara, 2020).

The formation of the integration of religion and science from Mehdi Golshani's perspective, the root of his thinking is the grouping of science, which has two poles: sacred science and secular science. According to him, science is the placement of God as the center of nature and knowledge that is formed based on his theistic view of the world. Meanwhile, secular science is based on devotion to God through thoughts, actions, or attitudes. Therefore, secular science refers to a paradigm of thinking that science and religion are unrelated or do not penetrate each other's objects of study (Bistara, 2020).

Mehdi Golshani's thoughts on science's relationship with religious knowledge are based on several reasons. The first reason is by Wira Hadi Kusuma, who explained that there is a normative basis for the importance of modern science, which is an element of the Muslim life and cannot be separated and engaged in as an activity whose value is worship. Second, there is the provision of an explanation regarding the function of science and technology, which not only focuses on something practical in nature but is also used for the benefit of the people to develop the Muslim world. It is generally underdeveloped, bringing scientists to a direction that is not only knowing and believing in Allah, (Kusuma, 2021).

According to Moh. Ainul Yakin et al. expressed Mehdi Golshani's opinion that science has brought a function to humanity and can encourage humans to get closer and get to know the Creator. Science can also increase understanding of God, improve Islamic civilization, and realize Islam's goals. Then, the role of science is as a basis for humans in overcoming every problem that confronts human life. Mehdi Golshani's view of science aims to solve problems that occur in the universe (Yakin et al., 2021).

Thus, Mehdi Golshani's contribution to the integration of science and religion is related to the dialectic that occurs so that it is not to be opposed, or in this case, does not intersect with each other in providing an understanding of God (Yakin et al., 2021). Mukhlisin Saad explained that Mehdi Golshani's thoughts on integrating science and Islam started from what he understood about the hadith of the Prophet Muhammad, which contained the command for every Muslim to seek knowledge. Mehdi Golshani explained that every science can lead every human being to be closer and know more about God. It is not only that science also increases the level of piety and faith in God, so everyone must study it. He opposed a dichotomy in matters of knowledge, which subjugated science and religion in a hierarchical and subordinate manner (Saad, 2016). According to the author, his view regarding integrating

science and religion provides mutual connections that can benefit each other, as the author explained previously. It is a symbiotic mutualism in which science answers every problem that hinders every human activity. At the same time, Islam becomes a guide or direction or can also be said to be a benchmark for dealing with these problems.

Basic Paradigm of Integration-Interconnection M. Amin Abdullah's

There are three keywords of dialogue and scientific integration which the author then makes the basic of M. Amin Abdullah's paradigm including complementarity, intersubjective examination, and creative imagination. The first keyword is related to mutual penetration, which according to M. Amin Abdullah, the relationship between science that has a basis on causality and religion that has a basis on meaning and value is a science that has a "semipermeable" or in this case what is meant is to penetrate each other. There is a conflict between the interpretation of religion and science to reality because the relationship between the two does not penetrate each other or does not communicate with each other so there is an assumption that the interpretation of scientific disciplines itself is the most correct (Abdullah, 2022). The relationship between religion and science should not be limited by walls, fences, or thick walls that are not possible to communicate and relate to but should indeed penetrate each other and communicate with each other. Although there is an integration of scientific disciplines, according to M. Amin Abdullah, each of these scientific disciplines is still able to maintain the existence of its identity and there is openness to discussion with each other (Abdullah, 2022).

The second keyword is intersubjectively tested where M. Amin Abdullah uses phenomenological meaning to explain the second keyword. He gave the idea that in the logic of science, the relationship between science and religion is known as subjective, objective, and intersubjective. In the study of phenomenology, especially in religious science, through the help of anthropological research, researchers are said to be able to record what they encounter in their daily lives against things that can be described objectively. They find and record carefully related to the definition of religion with elements namely ritual, doctrine, leadership, scripture, history, and morality, and can also be a tool. Objectively, this element is found in the community of followers of any religion or belief.

When these basic elements in a religion have a universal objective nature, they can be found everywhere that has been owned, concluded, practiced, or understood by every human being, both personally and collectively (Abdullah, 2022). From objective and subjective explanations in religious studies, then enter the intersubjective discussion of religious studies which can be said to be a scientific mental state that can be intelligently dialogued between objective life and the subjective in this case in religious studies. So intersubjective does not only refer to something religious but also to science in general (Abdullah, 2022). The next keyword is creative imagination M. Amin Abdullah explained that although logic thinks inductively and deductively can give an idea to the steps of scientific work, it is said that unfortunately many leave a role of creative imagination from scientists in the work steps of science (Abdullah, 2022). So it can also be said that there is a reflection on the absence of creative imagination that provides relationships and dialogues to each person, especially in the collective sphere. In the absence of an intersubjective testability process between one field of science and another science, it causes an understanding and interpretation of religion which is generally fundamental and follows Nash in every life both locally and globally (Abdullah, 2022).

With various thoughts related to integration-interconnection, M. Amin Abdullah designed an idea of his views related to the integration-interconnection at UIN Sunan Kalijaga through a triangular dialect of the relationship between general science and religious science which includes first, namely the text tradition, the second critical ethical tradition, and the third scientific academic tradition. Hendri Hermawan Adinugraha et al, mentioned that he made UIN Sunan Kalijaga known for its concept of scientific integration (Adinugraha et al, 2018). Furthermore, related to interconnection is proposed because of a criticism of the integration between the two sciences. This is also because integration can be done if the two sciences are interconnected. Islamic education has the aim of analyzing and exploring concepts in the field of education then there is a comparison with concepts in other disciplines. It is said that in UIN Sunan Kalijaga a new atmosphere was formed with the concept of integration-interconnection and was able to prove the existence of Islamic values for the basis of scientific development. For example, in lecture activities, lecturers not only convey their theory but also field practice while still having the value of the concept of integration-interconnection (Masyitoh et al, 2020).

Based on the curriculum used by UIN Sunan Kalijaga, according to M. Amin Abdullah in Luthfi Hadi Aminuddin, the development and conversion of IAIN to UIN is a scientific project with a breath of transformative religion. From that, it is not just changing or following but through the existence of scientific paradigms and epistemologies that are by the times. To transform, activities were carried out which included first, on September 18-19, 2002 there were seminars and workshops with the theme *Reintegrasi Epistemologi Pengembangan Keilmuan di IAIN*. Second, there are efforts to compile integration-interconnection scientific designs through various activities carried out which include preparing scientific designs in the syllabus or course curriculum, discussions on integration-interconnection science with reflections on the curriculum and course syllabus with experts, further improvements related to integration-interconnection scientific design based on team input, With or not it is only stated in the course curriculum, also in the syllabus (Aminuddin, 2010).

The third activity, on March 8, 2005 there was an effort to formulate nine principles of development in the academic field Aminuddin mentioned the nine principles which include first the development and combination of science with Islam, second strengthening the view of the integration-interconnection of science, third development as a whole related to charity, faith, and science, fourth there is the cultivation of an attitude of openness (inclusive), fifth there is an encouragement for change and sustainability of each scientific development, the sixth is the formation of partners between lecturers, employees, or students, the seventh is the creation of learning with an andragogical approach, active learning, and team teaching, eighth is the enthusiasm of students for the achievement of what is expected, ninth is the implementation of an integrated academic and administrative information system and technology base (Aminuddin, 2010).

The fourth activity is an effort to compile scientific development and curriculum consisting of five practical guidelines including the application of integration-interconnection approach guidelines, lecture practice guidelines, practical guidelines for curriculum and syllabus preparation, academic administration guidelines, and practical assessment guidelines. The fifth activity is the preparation of study program competencies based on the thought that there is a need for a review of the scientific view of integration-interconnection to the form of competency formulation. The formulation of a competency is said to require insight, vision from lecturers, and an

understanding of efforts to manage study programs, especially if they are related to expenditures from the study program. Study program competency formulation activities are based on various activities, namely discussions for books with titles as the researcher explained earlier, workshop seminars, and workshops on competency formulation of study programs at UIN Sunan Kalijaga (Aminuddin, 2010).

Basic Paradigm of Integration-Interconnection Mehdi Golshani's

From what is known, the view of integration-interconnection of science is the idea of M. Amin Abdullah but in this study, the author also tries to express Mehdi Golshani's thoughts on the paradigm of scientific integration-interconnection where later the author analyzes similarities and differences related to the integration-interconnection of science. In a lecture, it can also be said that during a discussion held in Indonesia in 2004, John F. Haught and Mehdi Golshani made presentations together at a forum in UIN Yogyakarta and Jakarta with the idea of themes related to the integration of science and religion. There are many differences between the two opinions, but there are also fundamental similarities, one of which is related to the Islamic science and secular science, while Mehdi Golshani gives two arguments with one being a metaphysical opinion based on religion. With that, Haught tried to root science in religious differences to reality (Bagir et al, 2005).

Hught and Golshani mutually assumed that science should make nature an object of study with a rational nature. In secular science, it can be interpreted as faith with no need to be proven although it can be said to be "forced" to be the belief that the law is systematic. Thus, from that there was the same idea between Mehdi Golshani and John F. Haught which made religion able to be used as a basis in a scientific work (Bagir et al, 2005). In Samsul Hidayat it is mentioned that there is something like Mehdi Golshani with the expression of a tree whose branches are dry as science, while there is a process of watering with religion to fertilize the tree (Hidayat, 2014).

There is a view that if science is value-free, it can be said to be a product of ignorance. The existence of the claim of absolutism of modern science through the process of openness is an alternative step to provide guarantees to civilization with the adjustment of human life. The existence of Islamic values embodies Islamic science to give birth to productive science. Thus, religious values are not only sufficiently created through scientific

ethics, but must also engage with the concept of ontology which is the object of science, and epistemology which is the scientific method. Mehdi Golshani gives a clearer meaning to Islamic science with his paradigm that science is knowledge related to the physical world by containing the Islamic worldview. So that the concept of Islamic Science according to Mehdi Golshani is not about the scientific miracles of the Quran, proof of God, or scientific activities through new steps with typical Islam, but Mehdi Golshani means is science that refers to world view Islam with the characteristic of being able to know how to remove the limitations of the universe because it only refers to the material realm, how to exist the creator to stay awake. So that in it still has a purpose that is attached to the universe and also the nature of moral acceptance for the universe (Hidayat, 2014).

It can be said that in Islam everything revolves on the axis of the oneness of God. Science and technology are tools that can be used to increase knowledge of God. Thus, in one of the books by Mehdi Golshani it is explained that, first, Muslims need to learn about science and technology. Second, it is required to revive the scientific spirit of the ancestors so that various branches of science can be re-formed that can be useful for the development of Islamic civilization. Third, man is the caliph on earth with various gifts of God such as intelligence and beautiful harmony between His creations. From that, Muslims can utilize knowledge and technology one of them for Islamic purposes. Fourth, every educational institution needs to pay special attention to moral issues for students so that they always do good. Fifth, in the Quran it is explained that followers of Islam are a balanced and just nation. From this, it can be said that there is no limit to the scope of empirical knowledge (Golshani, 1986).

Comparison of Integration-Interconnection Paradigm M. Amin Abdullah and Mehdi Golshani Study on Integration Science UIN Sunan Kalijaga Yogyakarta

Tabel 1. Comparison of integration-interconnection paradigms M. Amin Abdullah and Mehdi Golshani

Similarities	Differences
Both support the integration and interconnection of science. The thoughts of the two figures reveal that science has a complementary nature, so there is a	Referring to the perspective of M. Amin Abdullah, is more directed at the integration of the interconnection of science between religious science and general science, not only science

space for discussion	equipped with various approaches, while Mehdi Golshani's perspective is more directed at the integration of science between religion and science
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Referring to the description that has been described in the previous sub-discussion, related to the paradigm of integration-interconnection, in this sub-discussion, the author tries to take a common thread related to the perspectives of M. Amin Abdullah and Mehdi Golshani in providing concepts related to the integration-interconnection of a scientific field of study. Based on the thoughts of M. Amin Abdullah, looking at the previous discussion, it can indeed be said that he is the initiator the integration-interconnection of religious science with general science at UIN Sunan Kalijaga Yogyakarta. From this, there is no hesitation to state his thoughts that contradict or reject the integration of science. Through the concept, namely spider webs, to provide an overview of the integration-interconnection of science, each layer in the spider web can explain the position of each layer that the author has explained in the previous section.

Based on the spider web, each science with another science provides relationships that can provide clues, or in this case, comprehensive and in-depth knowledge, so that there is no doubt to draw conclusions that become problematic. This can happen because, judging from M. Amin Abdullah's previous explanation, general science is required to communicate, and there is no limit to the discussion space between religious science and general science, although it is undeniable that one science and another must have different scientific characteristics. So that the freedom to discuss makes scientific fields of study able to collaborate to gain views on the problems they experience.

Furthermore, referring to Mehdi Golshani's perspective on the integration of science, the author takes a common thread for an integrated science, according to Mehdi Golshani, namely religion and science. According to him, between religion and science, the two cannot be separated because they complement each other. The existence of science is used to obtain truth by making religion the basic. In this case, also related to the relationship between religious science and science in terms of religion being the basic, the author concludes that religious science here acts as a guide or guideline to help science in doing its work. From this explanation and based on table 1 according to the author's view, Mehdi Golshani supports the integration-

interconnection of science, but the relationship between religious science and science is different from the perspective of M. Amin Abdullah who created the idea of integration-interconnection between religious science and general science described through spider webs as previously explained, but both of them consider each other that between sciences have complementary properties with each other so that there is room for discussion.

Conclusion

The existence of a monodisciplinary view leaves no room for scientific studies to discuss, so science is rigid. The current era needs to have interconnections of knowledge, as initiated by M. Amin Abdullah and Mehdi Golshani. The thoughts of the two figures reveal that science has a complementary nature, so there is space for discussion with each other. Referring to the perspective of M. Amin Abdullah, which is more directed at the integration of the interconnection of science between religious science and general science, not only science is equipped with various approaches, but Mehdi Golshani's perspective is more directed at the integration of science between religion and science.

Referensi

- Abdi, S. (2020). "Inklusivisme Epistemologis sebagai Basis Integrasi Keilmuan Menuju Revitalisasi Kosmopolitanisme Peradaban Islam". *Abhats*. 1(1), 7-8. <http://www.abhats.org/index.php/abhats/article/view/3>.
- Abdullah, M. A. (2022). *Multidisiplin, Interdisiplin, & Transdisiplin Metode Studi Agama & Studi Islam di Era Kontemporer*. Yogyakarta: IB Times.
- Adinugraha, H. H. et al. (2018). "Fenomena Integrasi Ilmu di Perguruan Tinggi Keagamaan Islam Negeri: Analisis Terhadap Konsep Unity of Sciences di UIN Walisongo Semarang". *Hikmatuna: Journal for Integrative Islamic Studies*. 4(1), 7. <https://doi.org/10.28918/hikmatuna.v4i1.1267>.
- Agus, A. A. t.t. "Integrasi Nasional Sebagai Salah Satu Parameter Persatuan dan Kesatuan Bangsa Negera Republik Indonesia". *Jurnal Sosialisasi Pendidikan Sosiologi*. 3(3).
- Akbar, A., & M. B. (2022). "Pendidikan Islam Multi, Inter, dan Transdisiplin (Tinjauan Sejarah)". *Tarbiyah Islamiyah: Jurnal Ilmiah Pendidikan Agama Islam*. 12(1), 18-20. <https://doi.org/10.18592/jtipai.v12i1.6774>.
- Aminuddin, L. H. (2010). "Integrasi Ilmu dan Agama: Studi Atas Paradigma Integratif- Interkonektif UIN Sunan Kalijaga Yogyakarta.". *Jurnal Penelitian Keagamaan dan Sosial Budaya*. 4(1), 196-211. <http://dx.doi.org/10.21154/kodifikasia.v4i1.746>.

- Aslamiyah, L. et al. (2017). "Pengembangan Media Pembelajaran Komik Fisika Berbasis Integrasi-Interkoneksi Nilai-Nilai Alquran." *Upej*. 6(3), 46.<http://journal.unnes.ac.id/sju/index.php/upej>.
- Asmariyani, & N. (2017). "Islamisasi dan Integrasi Ilmu; Dasar Pemikiran, Definisi, dan Metodologi". *Jurnal Al-Afkar*. 2(1), 20.<https://doi.org/10.28944/afkar.v5i2.173>.
- Azhari, M. R., et al. (2022). "Integrasi Pendidikan Agama Islam dalam Pemanfaatan Teknologi di Era Society 5.0." *Kiiies*. 1, 214.<https://jurnal.uindatokarama.ac.id/index.php/kiiies50/article/view/1069>.
- Bagir, Z. A., et al. (2005). *Integrasi Ilmu dan Agama: Interpretasi dan Aksi*. Bandung: PT. Mizan Pustaka.
- Bistara, R. (2020). "Polemik Agamawan dan Saintis Seputar Covid-19: Menilik Gagasan Integrasi Agama dan Sains Perspektif Mehdi Golshani". *Dinika*. 5(2), 274-279.<https://doi.org/10.22515/dinika.v5i2.2721>.
- Fahmi, I. R., et al. (2021). "Non-Dikotomi Ilmu: Integrasi-Interkoneksi Dalam Pendidikan Islam." *Al-Mikraj : Jurnal Studi Islam dan Humaniora*. 1(2), 52-54.<https://doi.org/10.37680/almikraj.v1i2.750>.
- Golshani, M. (1986). *The Holy Quran and the Sciences of Nature*. Tehran: Islamic Propagation Organization.
- Hanifah, U. (2018). "Islamisasi Ilmu Pengetahuan Kontemporer (Konsep Integrasi Keilmuan di Universitas-Universitas Islam Indonesia)". *Tadris: Jurnal Pendidikan Islam*. 13(2), 279.<https://doi.org/10.19105/tjpi.v13i2.1972>.
- Hidayat, S. (2014). "Sacred Science vs. Secular Science: Carut Marut Hubungan Agama Dan Sains". *Kalam*. 8(1), 92-93.<https://doi.org/10.24042/klm.v8i1.169>.
- Hidayat, S. (2021). "Integrasi Nilai Islam Dalam Pendidikan: Pembelajaran Integratif di SMA Islam Al- Muttaqin, Tasikmalaya". *Tadris: Jurnal Pendidikan Islam*. 16(1), 142.<https://doi.org/10.19105/tjpi.v16i1.4665>.
- <https://kbbi.web.id/interkoneksi>, diakses Pada tanggal 12 Oktober 2022 Pukul 04.45 WIB.
- Kerimbayeva, R. K., et al. (2021). "Theoretical Foundations of Educational Integration". *Bulletin Series of Pedagogical Sciences*. 66, 55-60.<https://doi.org/10.51889/2020-2.2077-6861.10>.
- Kusuma, W. H. (2015). "Mendialogkan Sains dan Agama dalam Upaya Resolusi Konflik". *Jurnal Ilmiah Syi'ar*. 15(2), 14-15.<http://dx.doi.org/10.29300/syr.v15i2.1507>.
- Labaso, S. (2018). "Paradigma Integrasi-Interkoneksi di Tengah Kompleksitas Problem Kemanusiaan". *Al-A'raf: Jurnal Pemikiran Islam dan Filsafat*. XV(1), 340-347.<https://doi.org/10.22515/ajpif.v15i2.1462>.
- Makiah, Z. (2021). "Rekonsiliasi Islam dan Sains Dalam Perspektif Nidhal Guessoum". *Khazanah: Jurnal Studi Islam dan Humaniora*. 19(1), 61.<https://doi.org/10.18592/khazanah.v19i1.4150>.
- Masyitoh, D., et al. (2020). "Amin Abdullah dan Paradigma Integrasi-Interkoneksi,".

- Jurnal Sains Sosial dan Humaniora. 4(1), 86-87. <https://doi.org/10.30595/jssh.v4i1.5973>.
- Musyoyih & A. S. (2020). "Kontribusi Konsep Sains Islam Mehdi Golshani dalam Menyatukan Epistemologi Agama dan Sains". Prosiding Konferensi Integrasi Interkoneksi Islam dan Sains. 2, 96. <http://sunankalijaga.org/prosiding/index.php/kiiis/article/view/382>.
- Nuryantini, Ade Yeti, et al. (2018). "Integration Science and Religion: An Analaysic in Islamic Higher Education," *Tarbiyah: Journal of Education in Muslim Society*. 5(1). <http://dx.doi.org/10.15408/tjems.v5i1.9508>.
- Saad, M. (2016). "Pemikiran Mehdi Golshani Tentang Dialektika Agama dan Sains", *Teosofi: Jurnal Tasawuf dan Pemikiran Islam*. 6(2), 344. <https://doi.org/10.15642/teosofi.2016.6.2.330-354>.
- Suharto, T. (2018). "Pemetaan Ayat-Ayat al-Qur'an tentang Rumpun Ilmu Agama dalam Perspektif Paradigma Integrasi-Interkoneksi," *Intizar*. 24(1), 90. <https://doi.org/10.19109/intizar.v24i1.2188>.
- Sumarni & S. (2022). "Implementasi Integrasi Ilmu Di Ptki: Integrasi Dalam Tridarma Perguruan Tinggi". *Edukasi*. 20(2), 130. <https://doi.org/10.32729/edukasi.v20i2.1246>.
- Suryadilaga, M. A. (2020). "Pemahaman Hadis Tentang Covid-19 Dalam Perspektif Integrasi-Interkoneksi Amin Abdullah," *Khazanah*. 18(2), t.hal. <http://dx.doi.org/10.18592/khazanah.v18i2.3795>.
- Yakin, M. A., et al. (2021). "Konsep Pemikiran Mehdi Golshani: Agama dan Sains," *Al-Mikraj: Jurnal Studi Islam dan Humaniora*, 1(2), 64-65. <https://doi.org/10.37680/almikraj.v1i2.674>.